



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-0482; Directorate Identifier 2015-NE-06-AD; Amendment 39-18200; AD 2015-14-02]

RIN 2120-AA64

Airworthiness Directives; GE Aviation Czech s.r.o. Turboprop Engines

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain serial number GE Aviation Czech s.r.o. M601E-11, M601E-11A, and M601F turboprop engines. This AD requires inspection of the reduction gearbox and supporting cone. This AD was prompted by the determination that wear or cracking, and subsequent misalignment of the quill shaft of the engine and the power turbine (PT) shaft, may lead to rupture of the quill shaft, overspeed of the PT, and uncontained engine failure. We are issuing this AD to prevent misalignment and rupture of the quill shaft, which could lead to overspeed of the PT, uncontained engine failure, and damage to the airplane.

DATES: This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this AD, contact GE Aviation Czech s.r.o., Beranových 65, 199 02 Praha 9 – Letňany, Czech Republic; phone: +420 222 538 111; fax: +420 222 538 222. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-0482. You may view this service information at the FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-0482; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the mandatory continuing airworthiness information (MCAI), the regulatory evaluation, any comments received, and other information. The address for the Docket Office (phone: 800-647-5527) is Document Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Philip Haberlen, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England

Executive Park, Burlington, MA 01803; phone: 781-238-7770; fax: 781-238-7199; email: philip.haberlen@faa.gov.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to the specified products. The NPRM was published in the Federal Register on April 10, 2015 (80 FR 19244). The NPRM proposed to correct an unsafe condition for the specified products. The MCAI states:

It has been identified that misalignment between the quill shaft of the engine and the Power Turbine (PT) shaft may lead to a rupture of the quill shaft.

This condition, if not detected and corrected, could lead to overspeed of the PT and consequent uncontained engine failure, possibly resulting in damage to the aeroplane and injury to occupants and/or persons on the ground.

Related Service Information under 1 CFR Part 51

We reviewed GE Aviation Czech s.r.o. Alert Service Bulletins (ASBs) No. M601E-11/28, M601E-11A/15, and M601F/26, all Revision 2, all dated January 23, 2015. This service information describes procedures for inspecting the M601 reduction gearbox and supporting cone. This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section of this AD.

Comments

We gave the public the opportunity to participate in developing this AD. We received no comments on the NPRM (80 FR 19244, April 10, 2015).

Conclusion

We reviewed the available data and determined that air safety and the public interest require adopting this AD as proposed.

Costs of Compliance

We estimate that this AD affects 16 engines installed on airplanes of U.S. registry. We also estimate that it would take about 112 hours per engine to comply with this AD. The average labor rate is \$85 per hour. Required parts cost about \$21,376 per engine. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$494,336. Our cost estimate is exclusive of possible warranty coverage.

Authority for This Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify this AD:

- (1) Is not a “significant regulatory action” under Executive Order 12866,
- (2) Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979),
- (3) Will not affect intrastate aviation in Alaska to the extent that it justifies making a regulatory distinction, and
- (4) Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2015-14-02 GE Aviation Czech s.r.o. (Type Certificate previously held by WALTER Engines a.s., Walter a.s., and MOTORLET a.s.): Amendment 39-18200; Docket No. FAA-2015-0482; Directorate Identifier 2015-NE-06-AD.

(a) Effective Date

This AD becomes effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to GE Aviation Czech s.r.o. M601E-11, M601E-11A, and M601F turboprop engines with the following serial numbers (S/Ns):

(1) Model M601E-11: S/Ns 833244, 841289, 852239, 861007, 881217, 884021, 892046, 892219, 894018, 903028, 913038, and 912023.

(2) Model M601E-11A: S/Ns 902004 and 883046.

(3) Model M601F: S/Ns 912001 and 924002.

(d) Reason

This AD was prompted by the determination that wear or cracking, and subsequent misalignment of the quill shaft of the engine and the power turbine (PT) shaft, may lead to rupture of the quill shaft, overspeed of the PT, and uncontained engine failure. We are issuing this AD to prevent misalignment and rupture of the quill shaft, which could lead to overspeed of the PT, uncontained engine failure, and damage to the airplane.

(e) Actions and Compliance

Comply with this AD within the compliance times specified, unless already done.

(1) Within 300 flight hours, or six months after the effective date of this AD, whichever occurs first, inspect the reduction gearbox and supporting cone. Use GE

Aviation Czech s.r.o. Alert Service Bulletins (ASBs) No. M601E-11/28, M601E-11A/15, and M601F/26, all Revision 2, all dated January 23, 2015, including Appendix 2, paragraph 4., Inspection, (the issue date is not specified in the appendix), as applicable, to do the inspection.

(2) If any crack is detected on the quill shaft, PT shaft, or the supporting cone, or if the quill shaft or PT shaft involute spline wear exceeds 0.12 mm, then before further flight, replace each cracked or worn part with a part eligible for installation.

(f) Credit for Previous Actions

If you performed the actions required by paragraphs (e)(1) and (e)(2) of this AD before the effective date of this AD using GE Aviation Czech s.r.o. ASBs No. M601E-11/28, M601E-11A/15, or M601F/26, all Revision 1, all dated December 23, 2014, as applicable, or Initial Issues, all dated June 27, 2014, as applicable, you have met the requirements of this AD.

(g) Alternative Methods of Compliance (AMOCs)

The Manager, Engine Certification Office, FAA, may approve AMOCs for this AD. Use the procedures found in 14 CFR 39.19 to make your request. You may email your request to: ANE-AD-AMOC@faa.gov.

(h) Related Information

(1) For more information about this AD, contact Philip Haberlen, Aerospace Engineer, Engine Certification Office, FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA 01803; phone: 781-238-7770; fax: 781-238-7199; email: philip.haberlen@faa.gov.

(2) Refer to MCAI European Aviation Safety Agency AD 2015-0014, dated January 30, 2015, for more information. You may examine the MCAI in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating it in Docket No. FAA-2015-0482.

(i) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless the AD specifies otherwise.

(i) GE Aviation Czech s.r.o. Alert Service Bulletin (ASB) No. M601E-11/28, Revision 2, dated January 23, 2015, including Appendix 2, (the issue date is not specified in the appendix).

(ii) GE Aviation Czech s.r.o. ASB No. M601E-11A/15, Revision 2, dated January 23, 2015, including Appendix 2, (the issue date is not specified in the appendix).

(iii) GE Aviation Czech s.r.o. ASB No. M601F/26, Revision 2, dated January 23, 2015, including Appendix 2, (the issue date is not specified in the appendix).

Note 1 to paragraph (i)(2): GE Aviation Czech s.r.o. ASBs No. M601E-11/28, M601E-11A/15, and M601F/26, all Revision 2, all dated January 23, 2015, including Appendix 2, are co-published as one document with ASBs No. M601D/44, M601D-1/29, M601D-11NZ/18, M601E/59, and M601E-21/26, which are not incorporated by reference.

(3) For GE Aviation Czech s.r.o. service information identified in this AD, contact GE Aviation Czech s.r.o., Beranových 65, 199 02 Praha 9 – Letňany, Czech Republic; phone: +420 222 538 111; fax: +420 222 538 222.

(4) You may view this service information at FAA, Engine & Propeller Directorate, 12 New England Executive Park, Burlington, MA. For information on the availability of this material at the FAA, call 781-238-7125.

(5) You may view this service information at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Burlington, Massachusetts, on June 26, 2015.

Ann C. Mollica,
Acting Directorate Manager, Engine & Propeller Directorate,
Aircraft Certification Service.
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